DOCUMENT RESUME

ED 209 567 CG 015 520

AUTHOR Caine, Robert L.
TITLE Anomie, Women in the Labor Force and Suicide.
PUB DATE 25 Apr 81
NOTE 15p.; Paper presented at the Annual Meeting of the American Association of Suicidology (14th, Albuquerque, NM, April 24-26, 1981). Best copy available.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Divorce; *Employed Women; *Females; Labor Force; *Marital Status; Predictor Variables; Role Perception; Sex Differences; Sex Role; *Social Change; *Social Influences; *Suicide
IDENTIFIERS *Anomie Theory

ABSTRACT

Previous studies by Newman, Whittemore, and Newman (NWN) reported that between the years 1959 and 1963 and the years 1962 and 1967, percentages of women in the labor force increased as well as suicide rates. The role of women in the labor force was indicative of anomie, which correlated with suicide. The relationship between working women and suicide has changed along with societal changes. A replication of these studies was attempted using data from 597 suicide cases occurring in the years 1967-1973. Specifically, the dependent variables from the NWN studies and two new variables, percent married and percent divorced, were examined. Results showed that race, housing, and income were significant predictors. Age, the weakest predictor in the NWN studies, was now a significant predictor of suicide rate. The variable, "women in the labor force," was not a significant predictor in the replication study. An analysis of the variables, "percent married," and "percent divorced," using sex-specific suicide rates concluded that male suicide rates correlated positively with the divorce rate, while female suicide rates correlated positively with the marriage rate. The existing social and political situations of the three time periods may help to explain the findings. (NRB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED209567

BEST COPY AVAILABLE

Anomie, Women in the Labor Force and Suicide

Robert L. Caine
Assistant Professor of Sociology
Columbus College

A paper prepared for presentation at the Annual Meetings of the American Association of Sucidology, Albaquenque, New Mexico, April 25, 1981.

CG 015520

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert L. Caine

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This study reexamines a relationship that Newman, Whittemore and Newman found between the proportion of women in the labor force and suicide rates. In the original study a strong relationship was found using two different sets of data, one from Chicago covering 1959 through 1963 and one from Fulton County, Georgia covering 1962 through 1967. The restudy replicates the Fulton County portion of the study using data from the time period 1967-1973. The relationship between women in the labor force and suicide rates failed to replicate. It is the contention of this paper that the failure to replicate is due to changing definitions of sex roles in American society during the time periods covered by these studies. To be specific, the role of a working woman in the earlier periods (1959-1963 for Chicago and 1962-1967 for Fulton County) was an anomic role. By the time period of the replication Women's Liberation was cover story material for Time Magazine and the roles for working females were more structured. Women in the labor force was indicative of anomie, which correlated with suicide, in the original study. The relationship disappears as society changes. Now let me describe the studies.

Newman, Whittemore and Newman, (hereafter called NWN) in papers read in 1971 (1971a, 1971b), and in an article published in Social Problems in 1973 entitled "Women in the Labor Force and Suicide" (1973) report the findings of a regression analysis of suicide data. They analyzed suicide rates from 75 Chicago community areas and 112 census tracts in Fulton County, Georgia (Fulton County is the largest county in the Atlanta metropolitan area).

Using suicide rates as the independent variable, a regression analysis was done using seven independent variables representing demographic factors, socio-economic indicators, the physical environment, and labor force participation. The demographic variables were age and percentage non-white. The socio-economic indicators were a social rank index (based on occupation and education) and an income variable. The physical environment variable was measured by a housing index. Labor force participation was represented by male unemployment and the percentage of women who were in the labor force. NWN's study, using stepwise multiple regression, demonstrated that the percentage of women in the labor force was significantly related to suicide rates in both the Chicago and Fulton County analyses. For Fulton County this variable was the third variable entered but had the second highest beta weight. It was one of the two variables that were significant at the .05 level; race was the other significant variable. In Chicago, the percentage of women in the labor force was the first variable entered and had the third highest beta weight. In the Chicago sample it was significant at the .01 level along with race, housing and male unemployment.

The present study attempted to replicate the NWN findings. Suicide data was obtained by census tract from death certificates on file with the Fulton County Health Department. This was the same source used in the NWN study although the same area covered 126 census tracts instead of only 112 in NWN. The replication, using the years 1967-1973 had the advantage that the 1970 decennial census fell in the middle of the study period making the suicide

rates more stable. Due to the small numbers of suicides involved for any given year, it was felt that suicide data for individual years would be too unstable for a meaningful analysis (Linden and Breed, 1976:79-82). In total there were 597 suicides over the seven year period for a rate of 14 per hundred thousand.

The dependent variables used in the study were 1) age defined as the percentage of the population 20 years old or older, 2) race defined as the percentage of the population that is Negro, 3) male unemployment defined as the percentage of males, 16 years of age and older who are unemployed, 4) women in the labor force (hereafter written as WLF) defined as the percentage of all females, 16 years of age and older who are in the labor force, 5) income defined as the median family income including unrelated individuals, 6) povery defined as the percentage of all families with income below the poverty level, and 7) a Shevky-Bell (1955) social rank index based on occupation and education. Occupation is defined as the percentage of all employed persons, 16 years of age and older in non-professional, non-managerial occupations. Education is defined as the percentage of all persons, 25 years of age and older, with 8 years of schooling or less.

All of these definitions attempt to replicate the NWN study as closely as possible. The original study was heavily indebted to Shevky and Bell Social Area Analysis (1955), which used the women in the labor force variable as an indicator of urbanization.

Here it is important to note that NWN found great consistency between their Chicago results and those of Fulton County. Race and WLF were significant predictors for both samples (see Table 1).

For the Chicago data, the housing index, male unemployment, and income were also significant predictors. Even so, the relative contribution of each variable was similar for both samples. A Kendall Rank Correlation Coefficient for the original Fulton County data, calculated using the ranking of the beta coefficients, is T = .8095 (p = .0054) (Bernstein, 1966:71-72, 140). These regression equations are significantly related to each other. When the second Fulton County sample is examined, the situation changes drastically.

In the more recent sample, race is a significant predictor, as it was in the earlier study, and housing and income are significant, as they were in the Chicago sample. Age was the weakest predictor in the two original samples but is now one of the significant predictors of suicide rate. It should be noted that WLF, which was significant in this study and is the least important predictor. The correlation between WLF and suicide rate was .559 for Chicago and .307 for Fulton County. In the replication, this correlation was dropped to -.016.

This represents a significant shift in the pattern of the regression equations between the original study and the attempted replication. The WLF variable is not a significant predictor of suicide rate in the replication.

Since this study was concerned with sex roles in society two variables not included in the NWN analysis, but which have traditionally been important correlates of suicide, were added to the regression equation. These variables were percent married and percent divorced. Percent married represented the

percentage of all people, 16 years of age and over, who are married, while the percent divorced represented the percentage of all people 16 years of age and over who are divorced. These variables were analyzed using sex specific suicide rates reported in table 3 and 4.

The conclusion of this analysis was that male suicide rates correlate positively with the divorce rate while the female suicide rate correlates positively with the marriage rate.

Marital status variables were not included in NWN, but the findings of this study confirm to Durkheim's observations about the "integration of domestic society." He found, as did this study, that marriage had an adverse affect on the suicide rates of females and a protective affect on the male rates. This relationship is slightly (though not significantly) stronger for the post-1970 period than for the pre-1970 period. (A separate analysis not detailed here). Thus, it is possible to speculate that over time these variables are becoming better predictors of suicide rates than the WLF variable that NWN found so significant. As sex-role changes become a part of the collective consciousness in the post-1970 period of time, the sex-role changes reflected by the WLF variable ceases to be an anomic factor and become normative role patterns available to many people in society. Thus, this variable declines in predictive power. On the other hand, fluctuations in domestic life (marital status) more directly reflects the integration of a person into society, especially domestic society. Thus, these variables increase in importance. The increased predictive ability of

these variables reflects the increased availability of role models for working females after 1970.

The relationship between female sex-roles and marital status on the one hand and mental illness and suicide rates is well documented (Gove, 1972; Gove and Tudor, 1972; Durkheim, 1951). Broverman (1970) has pointed out that the characteristics which are traditionally defined as feminine (or the traditional female expressive role) are defined as negative, unhealthy traits in our society. Thus, marriage traps females in a negatively defined position, which provides rewards for the male but not for the female.

Given the fact that marriage has a greater toll on the mental stability of women than men in American society, it is not surprising to find a higher association between marriage and suicide among women than among men. In our patriarchally oriented society, it is the wife rather than the husband who is expected to make the most adjustments in the marriage. With the increased involvement of women working outside the home, the adjustment has often become more difficult instead of easier, as husbands are apt to give their wives permission to work outside of the home <u>provided</u> that they continue to perform their traditional household responsibilities. Many husbands are unwilling to balance their wives working outside of the home by an increase in their own involvement in the household chores.

Thus, a direct relationship was found between female suicide rates and the percent married. On the other hand, while the disintegration of a marriage bond has an adverse affect on both

spouses in a marriage, it is the male who suffers the most. The male loses his traditional source of emotional support. The female has stronger emotional resources and probably gains rather than loses from the challenge of assuming the instrumental responsibilities. Children are a strong protection against suicide and it is the female, not the male, who has the primary responsibility for the children in our society. Thus the divorce variable varies directly with male suicides, while it varies inversely with female suicides.

The implications of this analysis is that what NWN measured in their study was an indicator of anomie due to shifts in the status of women in our society at a particular point in history. The time variable is not suitable taken into account in interpreting data of this type. The comparison of the present data for Fulton County covers the time period of 1967 to 1973. NWN used data covering the period of 1962 to 1967. The NWN time period was a period of relative calm in Atlanta. This is pre-Vietnam, pre-Women's Liberation, and before the "flower children" invasion of parts of Atlanta. Thus, certain types of relationships do hold for that unique time period. By contrast, the 1967-1973 period was one of great change and conflict in the Atlanta area and was the height of hippie phenomena in Atlanta which centered in an area around the intersection of Peachtree and Tenth Streets known as "The Strip." The three census tracts that contain or adjacent to "The Strip" are exactly the three tracts with the three highest suicide rates in this study. Considering the small number of suicides involved, this has a

tremendous effect on the total rates. This hippie phenomenon is paralleled by changes in American society with respect to the war in Vietnam (Schuman, 1972). Durkheim (1951) and others have found that during war time, social solidarity increases. Durkheim related this increase in social solidarity to decreases in the suicide rates. Thus, it is very unusual that the Vietnam conflict actually decreased social solidarity in American society (Schuman, 1972). The war effort was not a total mobilization of the society for conflict. The war was a political issue that divided rather than solidified the society. Thus, the anomie increased while social solidarity declined. This unusual situation makes the period of time of the NWN study an exceptional rather than an ordinary period of time, one that can only be understood when viewed in the larger historical context.

TABLE I

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS AND STANDARD PARTIAL REGRESSION COEFFICIENTS (BETAS) FOR NWN VARIABLES FOR CHICAGO AND FOR BOTH FULTON COUNTY SAMPLES USING TOTAL SUICIDES AS THE DEPENDENT VARIABLE

Variable	Pearson's r			Betas					
	C	F_1	F_2	C		F_1		F_2	
	r	r	r	B	rank	B	rank	B	rank
Race	-.285*	-.391*	-.460*	-.935*	1	-.480*	1	-.284*	4
WLF	.359*	.307*	-.016	.597*	3	.316*	2	.009	7
Housing Index	-.093	.115	.002	-.869*	2	-.207	3	.484*	1
Male Unemployment	-.004	.201*	-.070	.562*	4	.185	4	-.037	5
Social Rank Index	-.114	.286*	-.339*	-.117	6	.159	5	-.034	6
Income	-.043	.135	.173	.581*	5	.107	6	.352*	2
Age	-.435*	.462*	-.507	.096	7	-.008	7	-.343*	3

Note: C = Chicago sample; F_1 = Fulton County sample for 1962-1967; F_2 = Fulton County sample for 1967-1973.

*significant at the .05 level.

TABLE 2

MULTIPLE REGRESSION ANALYSIS USING SEVEN NWN PREDICTOR

VARIABLES WITH TOTAL SUICIDE RATE AS THE DEPENDENT VARIABLE

Multiple R	0.61661
R Square	0.38021
Standard Error	9.10776

Analysis of Variance	D.F.	Sum of Squares	Mean Squares	F-ratio
Regression	7	6004.70573	857.81510	10.34118**
Residual	118	9788.25890	82.95135	

Variable	b	Beta	Standard Error of b	t
Social Rank Index	-0.01860	-0.03380	0.09467	0.197
Income	0.00090	0.35178	0.00043	2.073*
Age	-0.40984	-0.34330	0.12149	3.373***
Race	-0.07508	-0.28443	0.03259	2.304*
Male Unemployment	-0.14142	-0.03666	0.33919	0.417
WLF	0.01064	0.00946	0.11768	0.089
Housing Index	0.48647	0.48415	0.13625	3.574***
(Constant)	13.95604			

*Significant at .05 level
**Significant at .01 level
***Significant at .001 level

TABLE 3

MULTIPLE REGRESSION ANALYSIS ADDING MARITAL STATUS VARIABLES TO THE SEVEN NWN PREDICTOR VARIABLES WITH MALE SUICIDE RATE AS THE DEPENDENT VARIABLE

Multiple R	0.56952
R Square	0.32435
Standard Error	18.28408

Analysis of Variance	D.F.	Sum of Squares	Mean Squares	F-ratio
Regression	9	18616.66109	2068.51790	6.18747**
Residual	116	38779.67519	334.30754	

Variable	b	Beta	Standard Error of b	t
Housing Index	0.48902	0.25503	0.29813	1.640
Social Rank Index	0.13536	0.12903	0.23284	0.581
Income	0.00206	0.42343	0.00105	1.962
Age	-0.20865	-0.09168	0.29188	0.715
Race	-0.09553	-0.18983	0.07675	1.245
Male Unemployment	-0.99241	-0.13496	0.73636	1.349
WLF	0.02701	0.01261	0.26571	0.100
Married	-0.28868	-0.15711	0.27484	1.050
Divorced	3.26937	0.38202	1.12387	2.909**
(Constant)	2.11987			

*Significant at .05 level
**Significant at .01 level
***Significant at .001 level

TABLE 4

MULTIPLE REGRESSION ANALYSIS ADDING MARITAL STATUS VARIABLES TO THE SEVEN NWN PREDICTOR VARIABLES WITH FEMALE SUICIDE RATE AS THE DEPENDENT VARIABLE

Multiple R	0.51768
R Square	0.26799
Standard Error	7.23637

Analysis of Variance	D.F.	Sum of Squares	Mean Squares	F-ratio
Regression	9	2223.83976	247.90331	4.71867**
Residual	116	6074.34230	52.36502	

Variable	b	Beta	Standard Error of b	t
Housing Index	0.34853	0.47803	0.11799	2.954**
Social Rank Index	-0.15430	-0.38682	0.09215	1.674
Income	0.00024	0.12985	0.00041	0.578
Age	-0.22273	-0.25738	0.11552	1.928
Race	-0.00858	-0.04482	0.03037	0.283
Male Unemployment	-0.21959	-0.07853	0.29143	0.754
WLF	-0.08405	-0.10315	0.10516	0.799
Married	0.18169	0.26005	0.10977	1.670
Divorced	-0.20349	-0.06254	0.44480	0.457
(Constant)	7.00245			

*Significant at .05 level
**Significant at .01 level
***Significant at .001 level

REFERENCES

Broverman, Inge K., Donald M. Broverman, Frank E. Charlson, Paul S. Rosenkrantz, and Susan R. Vogel. "Sex-role stereotyping and clinical judgements of mental health." 1979 Journal of Consulting and Clinical Psychology 34:1-7.

Durkheim, Emile. Suicide: A Study in Sociology. John A. Spaulding and George Simpson. New York: Free Press. [1897] 1951

Gove, Walter R. "Sex, marital status and suicide." Journal 1972 of Health and Social Behavior 13:204-213.

Gove, Walter R. and J. Tudor. "Adult sex roles and mental 1972 illness." American Journal of Sociology 77:50-73.

Linden, Leonard L. and Warren Breed. "The demographic epidemiology of suicide." in Suicidology: Contemporary Developments. Edwin S. Shneidman (ed.). New York: Grune & 1976 Stratton.

Newman, John F., Kenneth R. Whittemore, and Helen G. Newman. "An analysis of the relation between suicide rates and 1971a community characteristics." Paper presented at the meeting of the Southern Sociological Society, Miami Beach, Florida.

Newman, John F., Kenneth R. Whittemore, and Helen G. Newman. "Community characteristics as predictors of suicide rates 1971b in two metropolitan areas." Paper presented at the 6th International Congress on Suicide Prevention, Mexico City.

Newman, John F., Kenneth R. Whittemore, and Helen G. Newman. 1973 "Women in the labor force and suicide." Social Problems. 21:220-230.

Schuman, Howard. "Two sources of antiwar sentiment in America." 1972 American Journal of Sociology 78:513-536.

Shevky, E. and W. Bell. Social Area Analysis. Stanford, Cali- 1955 fornia: Stanford University Press.